

## A.) AMENDMENTS TO THE CLAIMS:

1. (currently amended) A method of assigning a network address to a network access device connected ~~to~~ through an access network infrastructure ~~connected to one of~~ a plurality of available service provider networks, comprising ~~the steps of:~~

storing a database that maintains separate ranges of network addresses for each of a plurality of available service provider networks, the network addresses for allocation to separate subscribers of the available service provider networks;

receiving a request from a subscriber operating a network access device ~~selecting a service provided by~~ to subscribe to a service provider network and subscribed to by the subscriber from the plurality of available service networks;

allocating a network address from a pool ~~the ranges~~ of addresses allocated to subscribers of the service provider network; and

assigning the network address to the network access device using a host configuration protocol wherein the network address is utilized by the access network infrastructure to forward packets from the network access device to the service provider network ~~providing the selected service.~~

2. (currently amended) The ~~invention~~ method of claim 1 wherein the host configuration protocol is a Dynamic Host Configuration Protocol (DHCP) ~~DHCP~~.

3. (previously presented) The invention of claim 1 further comprising the step of authenticating the subscriber before assigning the network address to the network access device.

4. (currently amended) The ~~invention~~ method of claim 1 wherein the service provider networks utilize the Internet Protocol and ~~wherein the addresses are~~ comprise Internet Protocol addresses.

5. (currently amended) The ~~invention~~ method of claim 4 wherein the plurality of service provider networks are operated by different Internet Service Providers.

6. (currently amended) The ~~invention~~ method of claim 4 wherein the plurality of service provider networks offer access to different Internet Protocol-based services.

7. (currently amended) A method of assigning a network address to a network access device connected to through an access network infrastructure ~~connected~~ to one of a plurality of service provider networks, comprising the steps of:

storing a database that maintains separate ranges of network addresses for each of a plurality of available service provider networks, the network addresses for allocation to separate subscribers of the available service provider networks;

receiving a request from a subscriber operating a network access device ~~selecting a service provided by~~ to select a service provider network from the plurality of available service provider networks and to which the subscriber is subscribed;

allocating a network address from a pool ~~the range of~~ network addresses ~~allocated to~~ subscribers of the service;

receiving authentication information from the subscriber;

transmitting the authentication information to the service provider network; and

if ~~when~~ the service network authenticates the subscriber, assigning the network address to the network access device using a host configuration protocol, wherein the network address is utilized by the access network to forward packets from the network access device to the service provider network ~~providing the selected service.~~

8. (currently amended) The ~~invention~~ method of claim 7 wherein the host configuration protocol is a Dynamic Host Configuration Protocol (DHCP) ~~DHCP~~.

9. (currently amended) The ~~invention~~ method of claim 7 wherein the service network authenticates the subscriber using a Remote Authentication Dial In User Service (RADIUS) ~~RADIUS~~ protocol.

10. (currently amended) The ~~invention~~ method of claim 7 wherein the service provider networks utilize the Internet Protocol and wherein the addresses are Internet Protocol addresses.

11. (currently amended) The ~~invention~~ method of claim 7 wherein the plurality of service provider networks are operated by different Internet Service Providers.

12. (currently amended) The ~~invention~~ method of claim 7 wherein the plurality of service provider networks offer access to different Internet Protocol-based services